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*[Handwritten Signature]*

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 10/007,270  | 11/08/2001  | Gregory S. Hageman   | 020618-000120US          | 3566             |
| 20350   | 7590        | 08/23/2006           |                          | EXAMINER         |
| TOWNSEND AND TOWNSEND AND CREW, LLP<br>TWO EMBARCADERO CENTER<br>EIGHTH FLOOR<br>SAN FRANCISCO, CA 94111-3834 |             |                      | SEHARASEYON, JEGATHEESAN |                  |
|   |             |                      | ART UNIT                 | PAPER NUMBER     |
|   |             |                      |                          | 1647             |

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |   |                  |
|------------------------------|---|------------------|
| <b>Office Action Summary</b> | Application No.                           | Applicant(s)     |
|                              | 10/007,270                                | HAGEMAN ET AL.   |
|                              | Examiner<br>Jegatheesan Seharaseyon, Ph.D | Art Unit<br>1647 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07 June 2006.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-5, 10, 11, 21-25 and 27-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 2, 3, 27 and 28 is/are allowed.
- 6) Claim(s) 1, 4, 5, 10, 11, 21-25 and 29-31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: Appendix A1-2, B and C1-2.

**DETAILED ACTION**

1. This office action is in response to the amendment and remarks filed on 6/7/06. Claims 29-31 have been amended. Claim 26 is canceled. Therefore, claims 1-5, 10-11, 21-25 and 27-31 are currently pending and are examined.
2. The text of those sections of Title 35, U. S. Code not included in this action can be found in a prior Office action.
3. Any objection or rejection of record, which is not expressly repeated in this action, has been overcome by Applicant's response and withdrawn.
4. The Office is withdrawing the allowance of claims 5, 10 and 11 due to the new grounds of rejections applied below.

***Claim Objections***

5. Claims 27 and 28 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 24 and 25. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claims 24 and 27 are both drawn to a polynucleotide segment of SEQ ID NO: 1 that is at least 1000 nucleotides in length. Similarly, Claims 25 and 28 are both drawn to a polynucleotide segment of SEQ ID NO: 1 that is at least 2000 nucleotides in length.

***Claim Rejections - 35 USC § 112, first paragraph (maintained)***

6. The rejection of claim 4 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for nucleotides encoding a polypeptide of SEQ ID

NO: 2, does not reasonably provide enablement for a complement encoding a polypeptide comprising at least 190 contiguous amino acids residues of SEQ ID NO: 2 is maintained for reasons set forth in the Office Action dated 1/31/06 (pages 6-11) and below. Wand's factors were discussed in the previous Office Action dated 1/13/06. Applicant in the response filed 6/7/06 has not indicated how complement will encode the polypeptide of SEQ ID NO: 2. As indicated previously there is a single polynucleotide disclosed with reference to IPM150 isoform A, SEQ ID NO: 2. There is no enabling disclosure to support a complementary sequence to encode a polypeptide of SEQ ID NO: 2. Despite knowledge in the art for producing a polypeptide the specification fails to provide any guidance regarding its complementary nucleotide sequences to encode polypeptide of SEQ ID NO: 2. Thus, undue amount of experimentation would be required to generate the polypeptide of SEQ ID NO: 2 using the complementary sequences. Claims 5, 10, 11 and 21-22 are rejected insofar as they depend from claim 4.

7. The rejection of claim 4 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention is maintained for reasons set forth in the Office Action dated 1/31/06 (pages 3-6) and below. Applicant in the response filed 6/7/06 has not indicated how complement will encode the polypeptide of SEQ ID NO: 2. The specification discloses the nucleotides of SEQ ID NO: 1 and nucleotides encoding SEQ ID NO: 2 (Page 10, paragraph 47). This meets the written

description provisions of 35 USC 112, first paragraph. However, the specification does not disclose a complementary sequence that encodes a polypeptide comprising at least 190 amino acid residues of SEQ ID NO: 2 contemplated by the Applicant. The claims as written, however, encompass sequences which were not originally contemplated and fail to meet the written description provision of 35 USC 112, first paragraph because the written description is not commensurate in scope with the recitation of claim 4. The specification does not provide written description to support the genus encompassed by the instant claim. As a result, it does not appear that the inventors were in possession of complementary polynucleotide sequence set forth in claim 4. Therefore, only isolated polynucleotide encoding SEQ ID NO: 2 but not the full breadth of the claim meets the written description provision of 35 USC 112, first paragraph. Claims 5, 10, 11 and 21-22 are rejected insofar as they depend from claim 4.

***Claim Rejections - 35 USC § 112(New)***

8. Claims 1, 4, 5, 10, 11 and 21-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8a. Claim 1 is rejected as being indefinite because the claim recites "wherein said nucleic acid segment is 100 to 3330 nucleotides in length and has sequence identity to SEQ ID NO: 1". The Office is assuming that the nucleotide fragment contemplated could have any percentage identity to SEQ ID NO: 1, the claim is considered indefinite. Applicant can obviate the rejection by amending the claim to

recite "wherein said nucleic acid segment is 100 to 3330 contiguous nucleotides of SEQ ID NO: 1". Claims 23-25 are rejected insofar as they depend from claim 1.

***Claim Rejections - 35 USC § 102(New)***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9a. Claims 1 and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Macke et al. (1996, Accession No.W26960).

Macke et al. (1996, Accession No.W26960) discloses a 561bp cDNA fragment (EST) from human retinal library. Claim 1 is drawn to polynucleotide comprising a nucleic acid segment or its complement that is 100 to 3330 nucleotides long that has identity to SEQ ID NO: 1. In addition, claims 29-31 are drawn to polynucleotide primers or probes comprising a nucleotide sequence that is identical to or complementary to SEQ ID NO: 1 and between 12 and 100 contiguous nucleotides in length. As can be seen in Appendix A, the EST fragment disclosed by Macke et al. contains at least

300bp that are identical to SEQ ID NO: 1. Therefore, claims 1 and 29-31 are anticipated by Macke et al. (1996, Accession No.W26960).

9b. Claims 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Flor et al. (U. S. Patent No. 6, 228, 610).

Flor et al. discloses SEQ ID NO: 5 which has a 20bp fragment that is identical to 20 nucleotides of SEQ ID NO: 1 of the instant invention (see Appendix B). This 20mer sequence can be used as a primer or a probe. Therefore, claims 29-31 are anticipated by Flor et al. (U. S. Patent No. 6, 228, 610).

9c. Claims 1, 23 and 29-31 are rejected under 35 U.S.C. 102(a) as being anticipated by Felbor et al. (1998, Reference C10 on PTO1449 0f 2/05/2004, also Accession No. AF017776.1).

Felbor et al. (1998, Accession No.AF017776.1) discloses a 1235 bp cDNA fragment of human interphotoreceptor matrix gene (IPM150), exon 17. There is identity to about 700 nucleotides and appears not to be non-coding. . Claim 1 is drawn to polynucleotide comprising a nucleic acid segment or its complement that is 100 to 3330 nucleotides long that is identical to SEQ ID NO: 1. Further, claim 23, is drawn to polynucleotide comprising a nucleic acid segment that is at least 500 nucleotides long and that is identical to SEQ IDNO: 1. In addition, claims 29-31 are drawn to polynucleotide primers or probes comprising a nucleotide sequence that is identical to or complementary to SEQ ID NO: 1 and is between 12 and 100 contiguous nucleotides. As can been seen in Appendix C1-2 the cDNA fragment disclosed by Felbhor et al.

contains at least 1235bp that identical to SEQ ID NO: 1. Therefore, claims 1 and 23, 29-31 are anticipated Felbor et al. (1998, Reference C10 on PTO1449 of 2/05/2004, also Accession No.AF017776.1).

### **Conclusion**

10. Claims 2, 3, 27 and 28 are allowable.

### **Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jegatheesan Seharaseyon, Ph.D whose telephone number is 571-272-0892. The examiner can normally be reached on M-F: 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1647

JS

Art Unit 1647,  
August 10, 2006

*Gagrath Schling*  
*Patent Examiner.*

|    |      |   |      |
|----|------|---|------|
| Qy | 1742 | GACCTAGATAAGATGATCTGTGACACTGCCCCATCTGAGCTACAGAGCTCA     | 1801 |
| Db | 301  | GACCTAGATAAGATGATCTGTGACACTGCCCCATCTGAGCTACAGAGCTCA     | 360  |
| Qy | 1802 | GCAATATGTTCTGTCGGATCATTTCTTGGAGATAACCTCTGAGCTTAC        | 1861 |
| Db | 361  | TCCGATATGTTCTGTCGGATCATTTCTTGGAGATAACCTCTGAGCTTAC       | 420  |
| Qy | 1862 | ACTATATCACCACATTCTATGACCATATGCCCTAACGGCCGACTGGATTTCT    | 1921 |
| Db | 421  | ACTATATCACCACATTCTATGACCATATGCCCTAACGGCCGATCTGTAAAGCTCT | 480  |
| Qy | 1902 | TCAGTCGGTGTGCTAACATGGCTT                                | 1949 |
| Db | 481  | TCAGTCGGTGTGCTAACATGGCTT                                | 508  |

|            |  |
|------------|--|
| RESULT     | 14   |
| LOCUS      | BX097138   |
| DEFINITION | BX097138 Soares retina mRNA linear EST 04-FBB-2003   |
| ACCESSION  | BX097138   |
| VERSION    | IMAGE:98011359 ; IMAGE:190666 ; mRNA sequence.   |
| KEYWORDS   | BEST   |
| SOURCE     | BX097138.1 GI:27843098   |
| ORGANISM   | Homo sapiens (human)   |
| REFERENCE  | Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Primates; Catarrhini; Hominoidea; Homo. 1 (bases 1 to 47) Ebert, L., Heil, O., Hennig, S., Neubert, P., Petersch, E., Peters, M., Radefeld, U., Schneider, D. and Korn, B.   |
| AUTHORS    | Unpublished (2003)   |
| TITLE      | Human Unigeneset - RZPD3   |
| JOURNAL    | Unpublished (2003)   |
| COMMENT    | Contact: Ina Rolfs RZPD Deutsches Ressourcenzentrum fuer Genomforschung GmbH Im Neuenheimer Feld 560, D-69120 Heidelberg, Germany RZPD; IMAGE:98011359.  |
|            | RZPD1B; I.M.A.G.E. cDNA clone Collection; Human Unigeneset - RZPD3 (RZPD1B No.972) <a href="http://www.rzpd.de/ClineCadda/cgi-bin/DowloadPl.cgi?responsibleNo=972">http://www.rzpd.de/ClineCadda/cgi-bin/DowloadPl.cgi?responsibleNo=972</a> Contact: Ina Rolfs RZPD Deutsches Ressourcenzentrum fuer Genomforschung GmbH Heubnerweg 6, D-4059 Berlin, Germany |

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This Clone is available royalty-free from RZPD;  
contact RZPD ([clone@rzpd.de](mailto:clone@rzpd.de)) for further information. **Seq primer:**  
M13r. Primer sequence: **TTTACACAGGAAACAGCTTAC**.

| ORIGIN                | FEATURES   | SOURCE  |
|-----------------------|--|---|
| Query Match           | Query Match  | 14.2%; Score 472; DB 13; Length 472;                    |
| Best Local Similarity | 100.0%   | Fred. No. 2.9e-94;                                      |
| Matches               | 472;   | Mismatches 0; Indels 0; Gaps 0;                         |
| Qy                    | 1307   | GGCAATTCACTTGAAATTGCTGATCACTCGACGCCCTTGCTGACACCC        |
| Db                    | 1  | GGCAATTCACTTGAAATTGCTGATCACTCGACGCCCTTGCTGACACCC        |
| Qy                    | 1367   | AATCAGAGTCGCCACATCTTGCTGTTATACAGGGATGCTACTTGAGTCAGAC    |
| Db                    | 61   | AATCAGAGTCGCCACATCTTGCTGTTATACAGGGATGCTACTTGAGTCAGAC    |
| Qy                    | 1427   | TTCCTCTGTGAACCCGACTTGAGAGTGAGCTGCTACTTGAG               |
| Db                    | 121  | TTCCTCTGTGAACCCGCTTGAGCTGCTACTTGAG                      |
| Qy                    | 1487   | CTTCCTGCTCCACCTGGTACCTCCCTGCTGAGCTCCACCTTCTTAA          |
| Db                    | 181  | CTTCCTGCTCCACCTGGTACCTCCCTGCTGAGCTCCACCTTCTTAA          |
| Qy                    | 1547   | TGGCATTAAGATCTCTCTGACTGATCAAGGACCAATCAATGGACACTGAC      |
| Db                    | 241  | TGGCATTAAGATCTCTCTGACTGATCAAGGACCAATCAATGGACACTGAC      |
| Qy                    | 1607   | AGACATGCTGATGCTGGGCTTACCCATCCACCTGATCAAGGACCAATCAATGGAC |
| Db                    | 301  | AGACATGCTGATGCTGGGCTTACCCATCCACCTGATCAAGGACCAATCAATGGAC |
| Qy                    | 1667   | TGGCTCTGGGATTCACTCCACCTGATCAAGGACCAATCAATGGACACTGAC     |
| Db                    | 361  | TGGCTCTGGGATTCACTCCACCTGATCAAGGACCAATCAATGGACACTGAC     |
| Qy                    | 1727   | CCGAAGATATGCTGAGACCTAGATGAAATGCTGTCGAACCTCTSC 1778      |
| Db                    | 421  | CCGAAGATATGCTGAGACCTAGATGAAATGCTGTCGAACCTCTSC 472       |
| <b>RESULT 15</b>      |  |   |
| LOCUS                 | W22960/c   | 561 bp mRNA linear EST 08-MAY-2000                      |
| DEFINITION            | 16.1.0 Human retina cDNA randomly primed sublibrary Homo sapiens mRNA, mRNA sequence.  |   |
| ACCESSION             | W22960   |   |
| VERSION               | W22960.1   | GI:1306188  |
| KEYWORDS              | EST.   |   |
| SOURCE                | Homo sapiens (human)   |   |
| ORGANISM              | Fusaria, Chordata, Craniata, Vertebrata, Euteleostei, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo, Eukaryote                 |   |
| REFERENCE             | 1 (bases 1 to 561)   |   |
| AUTHORS               | Mache, J., Smallwood, P. and Nathans, J.   |   |
| TITLE                 | Unpublished (1996)   |   |
| JOURNAL               | Contact: Dr. Jeremy Nathans  |   |
| COMMENT               | Dr. Jeremy Nathans, Dept. of Molecular Biology and Genetics, Johns Hopkins School of Medicine, 725 North Wolfe Street, Baltimore, MD 21205 |   |
|                       | Tel: 410 951 4678  |   |
|                       | Fax: 410 614 0827  |   |
|                       | Email: <a href="mailto:nathans@mail.bjhu.edu">nathans@mail.bjhu.edu</a>  |   |
|                       | Copies of this library are NOT available.  |   |
|                       | PCR Primer: CTTTGAGGCGATGTCAGCGCTGTTAGTTCAGGTTAAGT   |   |
|                       | FORWARD: GAGCTTAAAGCCAAAGGTT   |   |
|                       | BACKWARD: GAGCTTAAAGCCAAAGGTT  |   |
|                       | Seq primer: GGTAAAGCCAAAGGTT   |   |
|                       | Location/Qualifiers  |   |
|                       | 1. .561  |   |
|                       | /organism: "Homo sapiens"  |   |
|                       | /organism: "Homo"  |   |
|                       | /organism: "Sapiens"   |   |

/db\_xref="taxon:9606"  
 /sex="mixed (males and females)"  
 /tissue\_type="retina"  
 /dev\_stage="adult"  
 /lab\_host="B. coli strain K802"  
 /clone\_lib="Human retina cDNA randomly primed sublibrary"  
 /notes="Organ: eye; Vector: lambda; sr10; Site 1: EcoRI; Site 2: EcoRI. The library used for sequencing was a sublibrary derived from human retina cDNA library. Inserts from retina cDNA library were isolated, randomly primed, PCR amplified, size-selected, and cloned into lambda gt10. Individual plaques were arrayed and used as templates for PCR amplification, and these PCR products were used for sequencing."

## ORIGIN

| Qy | Match  | Score   | Length     |
|----|--|---------|------------|
|    | Best Local Similarity  | 13.81   | 561        |
|    | Pred. No.  | 1.7e-91 |            |
|    | Matches  | 493     | Indels     |
|    | Conservative   | 0       | Mismatches |
|    |  | 33      | 2          |
|    |  |         | Gaps       |
|    |  |         | 21         |
| Qy | 1223 AGCAACCGAAACTATCTCACAGGACAGAACCTCTAACAGGATCAAGAACACTAG    | 1282    |            |
| Db | 532 ANCCAACTTGAACTACAGCAGAACAGAAAG-CCTTCANAGCTGATCANCAGACTAG   | 474     |            |
| Qy | 1283 AGGAGAGACAACTTTGGATTTGGGACAAATTCTAGTCATCTGTAATTCTGTGATCAC | 1342    |            |
| Db | 473 GGGAGACCAATCTGGATTTGGGACAAATTCTGATCAC                      | 414     |            |
| Qy | 1343 TCCCAGCCTTGCTCGAACCCAACTCAGGCTTCCCACATCTTGTGCTTATAACG     | 1402    |            |
| Db | 413 TCCCACCCCTGGCTCGAACCCAACTCAGGCTTCCCACATCTTGTGCTTATAACG     | 354     |            |
| Qy | 1403 AGATCTCTACTTGATGCTCCAGAACTCTCTCTGTGACCCAGCTGAGAGTGACG     | 1462    |            |
| Db | 353 AGGATCTCTACTTGATGCTCCAGAACTCTCTCTGTGACCCAGCTGAGAGTGACG     | 294     |            |
| Qy | 1463 GAGCGAGGATGCTTACCTGACACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT    | 1522    |            |
| Db | 293 GAGCGAGGATGCTTACCTGACACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT     | 234     |            |
| Qy | 1523 TGTCAAGAAGCTTCACTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT     | 1582    |            |
| Db | 233 TGTCAAGAAGCTTCACTGCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTTCT      | 174     |            |
| Qy | 1583 CCACAGATAAAATGGCCACTGACCAAGATGCTGATGACGGCTTCACTGCTTCTTCT  | 1642    |            |
| Db | 173 CCACAGANCAATGGCACTGACCAAGATGCTGATGACGGCTTCACTGCTTCTTCT     | 114     |            |
| Qy | 1643 GTGATTATCTGCAATAGCCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT      | 1702    |            |
| Db | 113 GTGATTATCTGCAATAGCCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT       | 54      |            |
| Qy | 1703 ATGACAGGGATGATGAGT-CAGTGCGGAGAATATGGCTGACACCTA            | 1749    |            |
| Db | 53 ATGACAGGGATGATGAGT-CAGTGCGGAGAATATGGCTGACACCTA              | 6       |            |

Search completed: March 1, 2004, 20:29:00  
 Job time : 8160 secs

# Appendix B

## Applicant copy

Tue Jan 17 14:25:45 2006

us-10-007-270-1.oligo.rna

Page 10

SOFTWARE: PastSeq for Windows Version 4.0

SEQ ID NO 161496

LENGTH: 601

TYPE: DNA

ORGANISM: Human

US-09-949-06-161496

Query Match 0.6%, Score 20, DB 3, Length 601,  
Best Local Similarity 100.0%, Pred. No. 30,  
Matches 20, Conservative 0, Mismatches 0, Gaps 0,  
Indels 0, Software: PatentIn Ver. 2.0

Qy 36 ATATATAATTATTCAC 55

Db 138 ATATATAATTATTCAC 157

RESULT 9

US-08-617-785-5

Sequence 5, Application US/08617785B

Patent No. 6228610

FILE REFERENCE: 4-19679/A/PCT

CURRENT APPLICATION NUMBER: US/08/617,785B

CURRENT FILING DATE: 16-03-19

EARLIER FILING DATE: 1994-09-07

EARLIER APPLICATION NUMBER: EPO 9416553.7

EARLIER FILING DATE: 1994-08-13

EARLIER APPLICATION NUMBER: EPO 93810663.0

NUMBER OF SEQ ID NOS: 26

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 5

LENGTH: 1399

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE: CDS

NAME/KEY: CDS

LOCATION: (1) .. (270)

TITLE OF INVENTION: HMR6, HMR7) and Related DNA Compounds

FILE REFERENCE: 4-19679/A/PCT

CURRENT APPLICATION NUMBER: US/08/617,464

EARLIER APPLICATION NUMBER: US/08/617,785

EARLIER FILING DATE: 1993-03-19

EARLIER FILING DATE: 1993-09-20

NUMBER OF SEQ ID NOS: 26

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 5

LENGTH: 1399

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE: CDS

NAME/KEY: CDS

LOCATION: (1) .. (270)

Query Match 0.6%, Score 20, DB 3, Length 1399,  
Best Local Similarity 100.0%, Pred. No. 30,  
Matches 20, Conservative 0, Mismatches 0, Gaps 0,  
Indels 0, Software: PatentIn Ver. 2.0

Qy 1201 CATGGACCATGGAGGAA 1220

Db 283 CATGGACCATGGAGGAA 302

RESULT 10

US-09-817-464-5

Sequence 5, Application US/09817464

Patent No. 6515107

GENERAL INFORMATION:

APPLICANT: Flör, Peter J.

APPLICANT: Ruhn, Rainer

APPLICANT: Lindau, Kristen

APPLICANT: Puttnar, Irene

APPLICANT: Knopfel, Thomas

TITLE OF INVENTION: Human Metabotropic Glutamate Receptor Subtypes (HMR4,

RESULT 9

US-08-617-785-5

Sequence 5, Application US/08617785B

Patent No. 6228610

GENERAL INFORMATION:

APPLICANT: Flör, Peter J.

APPLICANT: Ruhn, Rainer

APPLICANT: Lindau, Kristen

APPLICANT: Puttnar, Irene

APPLICANT: Knopfel, Thomas

TITLE OF INVENTION: Human Metabotropic Glutamate Receptor Subtypes (HMR7),

and Related DNA Compounds

FILE REFERENCE: 4-19679/A/PCT

CURRENT APPLICATION NUMBER: US/08/617,464

EARLIER APPLICATION NUMBER: US/08/617,785

EARLIER FILING DATE: 1993-09-20

EARLIER FILING DATE: 1994-09-07

NUMBER OF SEQ ID NOS: 26

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 5

LENGTH: 1399

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE: CDS

NAME/KEY: CDS

LOCATION: (1) .. (270)

Query Match 0.6%, Score 20, DB 3, Length 1399,  
Best Local Similarity 100.0%, Pred. No. 30,  
Matches 20, Conservative 0, Mismatches 0, Gaps 0,  
Indels 0, Software: PatentIn Ver. 2.0

Qy 1201 CATGGACCATGGAGGAA 1220

Db 283 CATGGACCATGGAGGAA 302

RESULT 9

US-08-617-785-5

Sequence 5, Application US/08617785B

Patent No. 6228610

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TITLE OF INVENTION: Human Metabotropic Glutamate Receptor Subtypes (HMR7),

and Related DNA Compounds

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